STAFFORDSHIRE COUNTY COUNCIL.

Annual Report

OF THE

School Medical Officer

INCLUDING

Report of the Senior School Medical Inspector

FOR THE YEAR 1918.

STAFFORD:
J. & C. MORT, LTD., 39, Greengate Street.
1919.

Medical Inspecting Staff during 1918.

School Medical Officer:

George Reid, O.B.E., M.D., D.P.H.,
County Medical Officer.

Senior School Medical Inspector:

John Priestley, M.R.C.S.

Assistant School Medical Inspectors:

Barbara Richardson, M.B.
(*Resigned April*, 1918.)

Edith M. Guest, M.D.
(*Appointed November*, 1918, *commenced duty December*, 1918.)

L. Margaret Lister, M.R.C.S., L.R.C.P.
(*Appointed November*, 1918, *commenced duty January*, 1919.)

School Nurses.

Gertrude Eastwood.
(*On military duty.*)

Edith A. Ockey.
(*On military duty.*)

Florence R. Pickard.
(*On military duty.*)

May Greer.

Table of Contents.

STAFFORDSHIRE COUNTY COUNCIL.

EDUCATION COMMITTEE.

Medical Inspection.

Report for the Year 1918.

PREFACE BY THE SCHOOL MEDICAL OFFICER.

The thinness of this report is evidence of the inroads the war made during 1918 on the medical inspection staff.

It must not be thought, however, that the time has been wholly lost. The large problems in front of us arising out of the Education Act, 1918, have been carefully considered, more especially in relation to the scheme recently approved by the County Council for greatly extending the infant welfare work of the County.

In this connection thought has been given to the important question of the avoidance of overlapping and the due co-ordination of the closely allied subjects of Infant Welfare and School Medical Treatment, and these matters are now under the consideration of a minor sub-committee of the Education Committee in the hope that a joint scheme to secure this object may be approved.

REPORT

OF THE

SENIOR SCHOOL MEDICAL INSPECTOR.

REPORT.

I regret to say that the activity of school medical inspection in 1918 has been at the very lowest possible ebb short of extinction, and this is reflected in the present meagre report. Early in April as soon as the Annual Report was completed Dr. Barbara Richardson joined one of the Scottish Women's Hospitals in France, and in spite of repeated advertisements we did not succeed until December in getting any assistant in her place. It was not possible for the Senior Medical Inspector to do more than to keep up with the routine administrative work.

Important Data.—The data as to the average numbers on rolls and in attendance have been estimated by the Superintendent of School Attendance Officers.

Number of schools in the Area (Dec.) .. (Provided 129, Non-provided 147)	376
Number of separate schools and departments	524
Average number on rolls (Jany.—Dec., August omitted)	73,966
Average number in attendance (Jany.—Dec., August omitted)	65,274
Average number of half-timers	408
Acreage	679,115
Total population (Registrar-General, 1911)	448,872
Population of school age (5—14) (Registrar-General, 1911)	89,389
Assessable Value	£2,215,885
Elementary education general rate ..	18d
Full yield of penny rate, 1918–19	£9,232

SANITARY CONDITION OF SCHOOLS.

As regards the provided or council schools, for which the Education Committee are wholly responsible, progress has been made in improving the conditions as will be seen from the following figures covering the period since medical inspection began :—

Date.	New Council Schools.				Council Schools re-constructed or considerably enlarged or improved.		Council Schools improved.*	
	Additional.		To replace others.					
	No.	Accommodation.	No.	Accommodation.	No.	Accommodation.	No.	Accommodation.
1903-8	2	930	10	3448	12	4215	56	26861
1909	—	—	9	3784	10	3736	20	9658
1910	—	—	8	2148	1	194	11	5785
1911	—	—	5	1686	2	1240	13	7084
1912	1	308	4	1354	3	1918	18	9770
1913	1	346	1	126	—	—	19	8788
1914	1	100	5	1408	1	552	14	4643
1915	—	—	4	440	—	—	11	3494
1916	—	—	1	258	—	—	—	—
1917	—	—	—	—	—	—	—	—
1918		—	—	—	—	—	—	—

* Improved as regards ventilation, warming, closet and lavatory accommodation, drainage and sewage disposal, cloakroom accommodation, paving of playgrounds, etc.

With reference to these figures the record under " New Council Schools " and " Council Schools re-constructed, etc.," relate to work completed during the year in question, in other words there is no duplication. On the other hand the records under " Council Schools improved " are in some cases duplicated because the same school may have had improvements effected on more than one occasion during the period of years under review.

METHODS OF MEDICAL INSPECTION.

Staff.—Only towards the end of the year did we begin to have applications for our posts of Assistant Medical Inspector. Miss Edith M. Guest, M.D. (Lond.), B.S., was appointed in November, 1918, and began work on December 3rd, 1918, and Miss L. Margaret Lister, M.R.C.S., L.R.C.P.. was appointed in November, 1918, but did not begin work until 15th January, 1919.

School Nursing.—During the year 1918 Mrs. Greer was our only acting staff nurse, the three other school nurses being still on war work. The bulk of the school nursing is done by part-time health visitors as described in the Annual Report on 1916. At the end of December there were 62 health visitors doing school nursing work, in addition to Mrs. Greer.

TABLE

showing results of school nursing since 1913.

Year	No. of girls inspected	Percentage verminous	Percentnge visited at home
1913.			
1st visit	12120	67	15·3
2nd ,, ...	11563	45	10·1
1914 (all visits) ..	43457	51	17·6
1915 ,, ..	43122	37	12
1916 ,, ..	47017	31	11·5
1917 ,, ..	99256	21·5	9·3
1918 ,, .	125023	16·4	6·5

Arrangements for 1919.—It is intended during 1919 to use the staff of school inspectors, which we may hope to see considerably enlarged as the year advances, in discovering cases of minor ailments among the school children and organising their treatment by the various school nurses. This rather than routine inspection will be more profitable while our staff is being re-instated and introduced to our methods of work. The omission of routine inspections during 1919 has the sanction of the Board of Education.

Action under Compulsory Powers.—During the year 1918 proceedings were taken under Section 12 of the Children Act, 1908, in one case with the following result :—four children committed to care of a fit person and mother sent to gaol for one month.

PREVENTION OF THE SPREAD OF INFECTIOUS DISEASES: CLOSURE OF SCHOOLS AND EXCLUSION OF SCHOLARS.

The number of closures during 1918 was as follows :—

Closure of Schools.

(Re-closures are counted as new closures.)

	Education Authority per S.M.O.		Sanitary Authority per M.O.H.	Total Number.
	On report of School Authorities.	On report of local M.O.H.		
Cerebro spinal meningitis ..	—	3	—	3
Chickenpox	1	10	—	11
Diphtheria	—	1	—	1
German measles	1	1	—	2
Influenza	59	818	—	877
Influenza and chickenpox ..	—	3	—	3
Influenza and sickness ..	1	—	—	1
Influenza and spotted fever ..	1	—	—	1
Influenza, catarrhs and colds	—	3	—	3
Influenza, measles and mumps	—	7	—	7
Influenza, measles and whooping cough	—	1	—	1
Measles	6	98	—	104
Measles and chickenpox ..	..	1	—	1
Measles and influenza ..	3	18	—	21
Measles and mumps	1	3	—	4
Measles and whooping cough	—	2	—	2
Mumps	—	21	—	21
Mumps and influenza ..	—	16	—	16
Pleuro-pneumonia	—	4	—	4
Scarlet fever	—	2	—	2
Scarlet fever and chickenpox	—	2	—	2
Typhoid fever	—	1	—	1
Want of fuel	—	1	—	1
Whooping cough	—	28	—	28
Whooping cough and colds ..	—	1	—	1
Whooping cough & influenza	—	7	—	7
	73	1052	—	1125

HYGIENE AND PHYSICAL EXERCISES.

Hygiene.—Instruction in hygiene has been suspended since the resignation of Miss Michaelis in the summer of 1918. Instead of appointing a successor at once the Committee propose to use the money formerly paid as the Lecturer's salary to provide Scholarships tenable at a University for the training of Hygiene teachers.

Physical Exercises.—Classes for instruction in physical exercises for men and women Teachers in elementary schools in the administrative county were conducted by Miss M. T. Hallett and a class maintained by the County Borough of Stoke with county aid was carried on by Mr. S. Wasdell.

In addition to instruction in the exercises included in the syllabus of the Board of Education, theoretical instruction and practice in teaching are included in the work of the classes.

The centres are varied from year to year and during the session 1918 about 60 students attended the classes.

Miss Hallett also visited the schools in the elementary area of the administrative county in order to advise the teachers and to ensure that instruction was properly applied in the schools. In July, 1918, Miss Hassalls was appointed to assist Miss Hallett in this work.

COMMENTARIES AND SPECIAL INQUIRIES.

Elementary School Teachers and the Mental Deficiency Act, 1913.

Teachers are not likely to overlook children committed to their care who are so different from the average child as not to be able to profit by the usual instruction. Such children are always a burden to the teacher and a hindrance more or less to the class. But not all teachers may have realised that the duty of pointing out such cases to the proper authorities is, by direction of the Board of Education, *obligatory*. Whereas it is optional for the parent to mention his suspicions as to the mental incapacity of his child, it is compulsory on the teacher to do so in respect of all scholars

between the ages of 7 and 16. The following remarks are intended to guide and inform the suspicions of teachers in this matter.

Nature of Mental Deficiency.

The term mental deficiency means different things to different minds or in different connections. We shall concern ourselves solely with mental deficiency as contemplated in the Act, in which it is defined as the characteristic of the following four classes of mentally defective persons :—

1. *Idiots.* Persons so deeply defective in mind from birth or from an early age as to be unable to guard themselves against common physical dangers.

Such children cannot be trusted even to cross the road, they would fall under the horse's feet, or they would be likely to fall into the fire.

2. *Imbeciles.* Persons in whose case there exists from birth or from an early age mental defectiveness not amounting to idiotcy yet so pronounced that they are incapable of managing themselves or their affairs, or in the case of children of being taught to do so.

Such children can generally avoid the physical dangers referred to under (1), but they could not be trusted, say, to find their way to school by themselves, etc.

3. *Feeble-minded Persons.* Persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility yet so pronounced that they require care, supervision and control for their own protection or for the protection of others, or in the case of children that they by reason of such defectiveness appear to be permanently incapable of receiving proper benefit from the instruction in ordinary schools.

This group contains by far the largest number of mentally defective children likely to be found in an elementary school. It is a most varied class and it will be sufficient for the present to point out the two standards implied, one being the standard

of the need of protection and the other being the standard of the apparently permanent incapacity to be educated in an ordinary school.

4. *Moral Imbeciles.* Persons who from an early age display some permanent mental defect coupled with strong vicious or criminal propensities on which punishment has had little or no deterrent effect.

Here it will be noticed in the first place that it is not moral delinquency alone which constitutes the moral imbecile, there must also be some permanent mental defect, presumably intellectual. In the second place it is essential to the definition of the Act that punishment must have been tried and must have been found to have little or no deterrent effect.

If these definitions are carefully studied it will be seen that mental deficiency, instead of being a vague and difficult matter, is an exceedingly simple conception. We are concerned only with mental deficiency in children. In the first place the deficiency must have been noticeable from birth or early life, *i.e.*, the cause must have been antenatal or must have originated in some ailment or injury which happened in the first two or three years of life. If a child has seemed to common sense observation normal as a baby, has begun to walk and talk and play with its toys, at the usual times like other children, has perhaps entered school at five and for a year or two has behaved there as an ordinary child, if such a child afterwards begins to show signs of mental aberration it is not a case of "mental defect" but of "insanity."

In the second place the defective child must conform to one or both of the standards just referred to. (1) He must stand in need of outside control either to defend society against him or to defend him against improper exploitation by society or against the common dangers of his environment. (2) He must appear to be permanently incapable, owing to the defectiveness, of education in an ordinary school.

Though most mentally defective children fail according to both these standards, a child might conceivably fail as

to the second but not materially as to the first. The practical consequences are vastly different in the two cases, and hence the seriousness of the mental deficiency in different cases varies very greatly indeed.

It must be emphasised that nothing outside the above definitions is to be regarded as mental deficiency according to the Act. It is *not* eccentricity, it is *not* any foolish or perverse conduct, it is *not* a default from any assumed average powers. What the teacher has to ask himself is just this: Has this child been "queer" or "unusual" from early life? Does this child as compared with ordinary children of the same age really stand in need of external control for his own sake or for that of others? Is this child mentally so different from ordinary children of the same age that I find it impossible to teach him by the usual methods? It will be noticed that each is a question of fact rather than of expert opinion.

From what has been said it will be seen how much the appreciation of mental defect depends on a knowledge of normal child nature. Only when one is aware through long observation or native intuition of the wide range and variety of the normal should one presume to have an opinion on the mental deficiency of any child. That being the case there should be no one whose evidence as to the mental condition of the child is more worthy of respect than an experienced teacher's, always supposing the teacher to have had the opportunity of studying the child for a sufficient length of time.

It is interesting to know that the average number of mental defectives among all the children on the school registers of England and Wales was considered by a Royal Commission to be about 0·7%, that is to say one out of every 140 or 150 children. The percentage varies in different areas, possibly in part owing to slight differences of standard among inspectors, —there will always be found a certain number of ambiguous cases. Our percentage in Staffordshire works out at 0·64. The lowest percentage recorded by the Commission was that of Durham county, 0·23%, and the maximum that of Manchester, 1·17%.

It is stated that out of 100 mentally defective children there will as a rule be found to be about six idiots and 18 imbeciles, the other 76 cases being such as would almost certainly at one stage or another come within the observation of elementary teachers in schools.

How the Cases present themselves.

For obvious reasons idiots are practically never found in school, but now and then an imbecile gets on the rolls. Such a one is commonly soon recognised for what it is, namely altogether too deeply defective for any part in school life.

Above the class of imbeciles comes the group of the feeble-minded with whom may be grouped the moral imbecile since the latter by definition must be feeble-minded as well. The children of this group as a rule present themselves to the non-expert in a very vague way at first. The child will be "strange" or "very backward"; it will be said that the teacher "can make nothing of it in class," or that the child "is making no headway"; or that he is "uncontrollable"; or that he "cannot talk," or sometimes that "he will not talk." Not infrequently the child is presented as "deaf and dumb." But even without any close study of the cases an observant teacher may feel able to group them roughly according to the dominance of certain obvious traits:—

A. There is the class of cases in which the predominant feature is a failure to concentrate *attention*. There are many degrees of this, the most extreme being sometimes spoken of as the "busy type of imbecile." In these extreme cases the child is very alert and active minded, the individual mental powers seem to be normal in themselves, curiosity is keen to a high degree, and the movements of the body are as quick as those of the mind. But the power of maintaining attention on any subject even for a moment is *nil*; whatever attracts the attention is dropped in a second for something else. Such a child cannot keep still a minute, he passes round your room fingering everything, pulling out the drawers of your writing table and upsetting your pen tray and papers.

They are often very affectionate children and sometimes boisterously good natured and high spirited. They have to be watched incessantly,—" they are always in mischief " as their parents phrase it.

B. There is another class in which the predominant feature is some highly exaggerated *emotion*, such as fear, as when a child shows extremity of terror or apprehension on the slightest approach of a stranger or even of his teacher, like a dog when you shake the whip at him ; or shyness as when the child cannot bear to walk across the schoolroom in public but averts his head and screens his face with his hands while he does so ; or cruelty beyond the ordinary callousness of boys ; or furious anger ; etc.

C. In the third group the most obvious defect is one of *intellect*, some very marked degree of stupidity or incapacity for intelligent action. Such incapacity may show itself in all the common concerns of life more or less equally, or chiefly, or it may be entirely, in the matter of school learning,—the three R's.

It need scarcely be said that a mentally defective child may show traits belonging to all these classes A, B and C.

Closer Study of the Symptoms.

The Act only takes cognisance of children of 7—16. Hence, though some kinds of mental defect like imbecility or low grade feeble-mindedness can be recognised at a much earlier age, it is better for the teacher to suspend judgment altogether till a child is approaching 8 years.

The various mental functions, including control of emotional states and of attention, depend upon nervous organs which develop and become active each at its appropriate average time after birth. But though there is an average time for each organ scarcely any two children attain to full and perfect action of it at precisely the same month or year. In a given case, therefore, what seems like mental deficiency may simply mean that expansion of the necessary organ is considerably behind time. Even when the organ (as subsequent events show) is hopelessly damaged, like a

badly cankered bud, it may still happen that some little development takes place and with it some slight improvement in the correlated mental power. At age 7 or 8, if the case is at all doubtful, judgment should be suspended absolutely.

I will suppose then that a child of this age has shown such behaviour or failure in school as to have come under suspicion of mental defect. How shall we proceed to investigate further?

Take the "can't talk" or "won't talk" cases. Here the first thing is to make sure we have not to do with the marred speech of cleft palate or similar obvious defect, or with the mere persistence of baby language,—the so-called "idioglossia." Clear enunciation is commonly attained in the third year, but many children of 6 or 7, especially boys, still speak the babble of a child of 2—3. But they may be otherwise quite intelligent as shown in the kindergarten and at their games.

The true deaf and dumb,—the children who cannot speak simply because they are stone deaf or nearly so,—are not often mistaken for the mentally defective, but not infrequently a mentally defective child is presented as deaf and dumb. The genuinely deaf and dumb child commonly leaves no doubt in the mind about his intelligence; he may be shy at school but at home he has his own code of signals and makes himself understood, often very cleverly. Then again in moments of excitement at least the deaf and dumb child jabbers away in a make believe language of his own, which the supposedly deaf and dumb but really mentally defective child as a rule does not.

The fact of absolute or extreme deafness should be carefully established by testing the child with loud noises. The greatest care however must be taken that the child experimented on does not perceive some movement, or the reflex in a bystander's face, from which he could *infer* a noise or sudden event. For a similar reason the noise should not be caused by a bang which sets the whole room vibrating, for we might be misled into thinking that the child had heard the noise when he had only felt the vibration. Such testing

is often better done for us by accident. In the course of prolonged association with the child there is sure to be some occasion,—a thunder clap or other unexpected noise,—on which the teacher can observe the different effects on the deaf child and on the others.

After eliminating the cleft palate, baby language and deaf and dumb cases all other cases of speechlessness or deeply defective speech justify a suspicion of mental defect.

The closer investigation of suspected cases of mental defect should take some such line as follows.

Early History.—As mental defect is due to damage or impeded development of various superior nerve centres it is of importance to note whether other centres also are late or faulty in developing. The dates of the following events should be noted. *Eruption of the milk teeth:* in a normal child the first milk tooth is cut as a rule more or less about the sixth or seventh month. *Walking and talking:* the nervous centres are in normal children sufficiently developed to admit of these powers early in the second year. *Control of bowels and bladder:* the nervous centres and connections concerned have commonly developed sufficiently to enable a child to give warning of its needs and avoid mishaps by the second to third year. *Clear enunciation of words:* this is commonly attained by about the third year.

In mentally defective children these powers are apt to be greatly delayed, unless indeed the cause of the mental defect is some injury or disease which started after birth at a time when these elementary functions had already become established.

General Powers.—The ultimate practical question in regard to every mentally deficient child is whether it will ever be able to take its place in the world. It need not be a high or responsible place, but is there any useful little niche it may hope to occupy as an independent being? No such independency is possible, in however humble degree, without a certain average power of *general judgment,* by

which is meant a right and useful apprehension of the bearings of common events, by which again in the last instance is meant such an apprehension of them as the common run of people would have. Hence one is perpetually on the watch in examining supposed defectives for evidences of default in common judgment. To take a simple example. When a child comes to school for the first time,—an intelligent child,—he is usually a little subdued and shy, but he takes the place assigned to him and without being told, or with the least putting in the way, *he straightway does what the others are doing*. This seems to us a matter of course but it is in reality an act of right and useful judgment; the child perceives things happening, draws his own conclusions and acts on them. It is a highly efficient mental process, and what is more to the point it is good common sense.

The following is a graduated series of actions from which we may infer whether a child in most simple things exercises a common sense judgment. The child is supposed to be about 8 years old, and we are assumed to be intimately acquainted with the powers of a normal child of 8.

Can the child—

walk, sit, stand, jump, hop, like an ordinary child;
come to school alone;
manage itself at the lavatory;
respond to the unspoken discipline of the school (*i.e.*, sit still, get up, etc., when the others do so);
do what the teacher tells it;
do what it sees others do in "following about" games, or in simple games like Ring of Roses;
play still more complicated games like Cat and Mouse (Though capable of playing the mouse can it be trusted to play the cat?); or, if older, play Rounders, Prisoners' base;
enter into the general life of the playground, or is the child generally seen standing or playing apart, "jigging about" aimlessly by itself; in other words, is the child accepted by other

children of the same age as an equal in games, or do they find that "it always puts us out";

do the various kindergarten manipulations;

interpret any accidental sound that may by chance be heard at the moment,—the bang of a door, the siren of a works, the patter of rain, a railway whistle, etc.;

interpret pictures in a book and divine in simple fashion the story illustrated; can it understand rough drawings of common objects made under its eyes (an intelligent child will often tell you what you are drawing before you have half finished it)

recognise and name common objects,—bowl, tumbler, penny, penknife, piece of chalk, key, etc. (The child should be asked: "What can you do with a key?" "What is a piece of chalk for?" etc.);

copy simple figures,—a square, diamond, Greek key pattern.

Are there any signs of viciousness according to the standard of the child's age,—cruelty, outrageous behaviour, obscenity, pilfering, lying, gross inconsiderateness, gross peevishness, exaggerated dreads, etc.?

Is the child "facile," *i.e.*, will it do any foolish thing it is put on to do by its fellows?

Binet and Simon Tests.—Head teachers should be interested in the tests designed by Binet and Simon in order to grade children according to their general mental powers. The plan of Binet and Simon was to find out questions of general applicability which children at particular years of their age were as a rule able to answer. The subject is discussed at greater length in the Annual Report for the year 1916, page 34, a copy of which will be sent to any teacher who applies for one. Suffice it here to say that up to age 9 or 10 the subject matter of the question is almost entirely non-scholastic and such as European or American children

at any rate must necessarily be familiar with, for example, names of the parts of their own bodies, their own names, common objects, simple pictures, simple counting, difference between light and heavy bodies or long and short sticks, the main divisions of time, simple colours, etc. After age 10 the questions are not unlike ordinary school tests. The Education Committee have had blank forms printed with instructions for the use of the Binet and Simon questions in the manner described in the Annual Report just referred to, and supplies will be sent to teachers at any time. The questions should be tested on normal children a good number of times before a teacher tries them on supposed defectives with a view to judging of their mental retardation. If any teacher is interested in this matter a medical inspector will gladly give a demonstration when at the school.

In addition to the Binet and Simon tests the teacher has of course the test of the child's place in his own school.

Scholastic Powers.—All scholastic culture centres about speech and writing. These accomplishments depend on the power of memorising certain sound symbols and sight symbols. The sound symbols have been utilised by the human race for the purposes of speech from time immemorial, the sight symbols have only been extensively used for the purpose of reading and writing for a century or two. It is therefore not surprising that speech is more fixed and less liable to individual variations and failures than reading and writing, the accomplishment of yesterday.

Tests of the Power of Memorising Sound Symbols.

No opportunity should be lost of going through the following tests both for sound symbols and sight symbols with admittedly normal children of various ages ; the manner of answering,—quickness, certainty, child's sense of amusement at being asked such a simple thing, etc.,—tell us quite as much as the formal success or insuccess of the child's reply.

It should first be ascertained that there is no gross degree of deafness.

Immediate memory.—Ask the child to say after you several numbers, or a logical sentence of several words, and note the number at which failure begins. Use disconnected numbers, not those in natural sequence; begin with two numbers; "Say after me 6, 9," then "4, 3, 7," "5, 6, 9, 1," and so on till you come to a number which the child cannot remember. A greater number of logically connected words are capable of being remembered than of disconnected numbers; a child of three will repeat successfully two numbers or five logically connected words.

Memory after an interval.—Here we select examples from things the child has learnt previously and not heard repeated quite recently. "Tell me your name?" "Where do you live?" "Repeat the alphabet." "Say 1, 2, 3 till I tell you to stop." "Say Jack and Jill," or "Little Jack Horner." "Say the Lord's Prayer." You should also if possible get the child to repeat some poem learnt a day or two before.

A child completely devoid of the power of memorising sound symbols would of course be absolutely irresponsive to these tests and would be what is sometimes spoken of as "word deaf." (Of course it would be necessary to make very sure that the failure was not due to mere shyness, obstinacy, etc.). Complete word deafness however is extremely rare but there are various degrees of retentiveness of memory of sound symbols which go far to explain many cases of marked backwardness and apparent stupidity.

Having thus ascertained the capacity of the auditory word memory we proceed to

Tests of the Power of Memorising Sight Symbols.

First make sure that there is no gross defect of vision,—that the child can see a tree, a post, etc., through the window, and pick up a piece of thread, etc., thrown on to the floor or the table.

You should then hear the child read using the classbook according to its age and if it stumbles with that taking earlier standards. Then look at the child's exercise books noting

peculiarities in (1) copying, (2) dictation, (3) composition, (4) drawing or brush work.

Then proceed to test in detail for what is called "word blindness,"—a rather unfortunate name because it is used to cover all cases from the extreme case of letter blindness in which a child has no power of memorising the symbols of the alphabet up to the well-known cases of the clever child who never can be taught to spell correctly the more difficult words in our unphonetic tongue.

The first thing is to find out whether the child has a general power of reading visual symbols. This is shown by the power of interpreting rough drawings made before the child,—an outline house with door, chimney and windows, a roughly drawn lamp post, or cat, or boot, etc.

Having ascertained that the child can interpret these signs easily you draw for the child various letters of the alphabet one by one using capitals or smalls according as the child has been accustomed to them. Do not proceed in alphabetical order but take the letters at random. Having drawn a letter you ask the child its name and note its failure to remember.

Supposing the child to have passed this test fairly well you proceed to simple monosyllables phonetically spelt,—dog, cat, pig, pot, bat, etc. You should write down the word letter by letter and ask the child to name the letter as you set it down then you say "What does that spell?" and note the failures.

Then you take the easier non-phonetic words in the same manner,—house, chief, first, girl, piece, peace, pierce, etc.; then the more difficult.

Finally in the same way you may test the Arabic numerals. It is curious how often it happens that a child has a good memory for the sight symbols of numbers when it may have a very poor memory for monosyllables or even single letters of the alphabet.

Having by the above method formed some opinion of the power of the child to memorise letters and words you proceed to test the power of copying, writing down for the

child some example that wants closely following, *e.g.*, Manchester, chump, etc. One must never be misled by accuracy of copying letters and words. To copy a word is essentially not different from copying any other set of curves and strokes, it does not involve in the least degree an intelligent appreciation of the symbolism. Completely word-blind children are often able to copy writing quite neatly.

Then dictation should be tested beginning with something very simple : It is a pin, and going on to more difficult sentences. Of course a child with word-blindness in its various degrees will be correspondingly faulty in its dictation ; very often an inspection of the dictation exercises of a class enables one to detect at once the word blind children or the partially word blind.

Tests of Fundamental Arithmetical Conceptions.

As to this I have nothing to tell schoolmasters ; they know all about it. It will suffice to say that we must distinguish the jingle of numbers in their natural sequence 1, 2, 3, etc., which is an act of sheer memory, from counting backwards which involves thought and perhaps visualisation. In testing the power of adding and subtracting mentally we notice whether it is done abstractly or only by the gross visualisation of simple examples (" If you had three apples and I took one away, how many would be left ? " etc.).

Teachers who may chance to read these remarks will be apt to say there is very little in all this. And they will be right, for the spirit of the Mental Deficiency Act, 1913, is entirely simple, practical and obvious.

JOHN PRIESTLEY.